

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Baker et al.

Docket No:

39780-2830P1C8

Serial No:

10/006,041

Group Art Unit:

1647

Filed:

December 06, 2001

Examiner:

Rachel B. Kapust

For:

SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

ACIDS ENCODING THE SAME

Commissioner for Patents Washington, D.C. 20231

DECLARATION OF AUDREY GODDARD, Ph.D. UNDER 37 CFR 1.131

- I, Audrey Goddard, Ph.D. do hereby declare and say as follows:
- 1. I am Senior Clinical Scientist at the Diagnostics, Development Sciences Department of Genentech, Inc., South San Francisco, CA 94080.
- 2. I am one of the inventors of the above-identified application.
- 3. I have read and understood the claims pending in this application, and are aware that the claims have been rejected as anticipated by U.S. Patent Publication No. 2003/0096951 (Jacobs *et al.*, publication date May 22, 2003 and effective filing date August 14, 1998).
- 4. I, along with other inventors of this application, conceived and reduced to practice the polypeptide designated as PRO1244 (SEQ ID NO:130) claimed in the above-identified application in the United States prior to August 14, 1998.
- 5. At the time the PRO1244 polypeptide was cloned and sequenced I was responsible for overseeing the sequencing of novel polypeptides, including the PRO1244 polypeptide (SEQ ID NO:130) claimed in the above-identified application.
- 6. A cDNA clone, referred to as DNA64883-1526 in the above-identified application, was identified as encoding the PRO1244 polypeptide.
- 7. The full length of the cDNA clone is shown in Figure 73 of the above-identified application. The full-length cDNA sequence has 2213 nucleotide residues. The full length of the PRO1244 peptide encoded by DNA64883-1526 is shown in Figure 74 of

- the above-identified application. The full-length PRO1244 polypeptide has 335 amino acid residues.
- 8. Copies of the pages from the GSeqEdit database which report the cloning and sequencing data for the PRO1244 polypeptide sequence and its encoding nucleic acid sequence are attached to this declaration (with the dates redacted) as Exhibit A.
- 9. The GSeqEdit report shows the full-length nucleic acid sequence for DNA-64883-1526 (identified as "DNA-64883") and the full-length PRO1244 polypeptide encoded by DNA 64883. Both the DNA-64883 and the PRO1244 polypeptide sequences were obtained prior to August 14, 1998.
- The DNA-64883 sequence shown in the GSeqEdit report is identical to that of SEQID NO: 129 disclosed in the above-identified application.
- 11. The beginning of the cDNA sequence corresponding to SEQ ID NO: 129 in the above-identified application is shown on page 1 of the GSeqEdit database report and the location of the first nucleotide is marked with "insert starts here" and an arrow. The location of the last nucleotide corresponding to SEQ ID NO: 129 is shown on page 11 and is marked with an arrow.
- 12. The amino acid sequence shown in the GSeqEdit report is identical to that of SEQ ID NO: 130 disclosed in the above-identified application.
- 13. The first 26 amino acid residues of the PRO1244 polypeptide (SEQ ID NO:130) encoded by the cDNA (DNA-64883) are also shown on page 1 of the GSeqEdit report and the remaining 309 residues appear on pages 2-6 of the report.
- 14. Exhibit A clearly shows that both the full-length DNA-64883 sequence and the full-length PRO1244 polypeptide sequence disclosed in the above-identified application were obtained prior to August 14, 1998.
- 15. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information or belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001

of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

Audrey Goddard

Date

SV 2037583 v1 6/15/04 3:03 PM (39780.2830)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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- 2. I am one of the inventors of the above-identified application.
- 3. I have read and understood the claims pending in this application, and are aware that the claims have been rejected as anticipated by U.S. Patent No. 6,525,174 (Young *et al.*, issue date February 25, 2003 and effective filing date June 4, 1998).
- 4. I, along with other inventors of this application, conceived and reduced to practice the polypeptide designated as PRO1244 (SEQ ID NO:130) claimed in the above-identified application in the United States prior to June 4, 1998.
- 5. At the time the PRO1244 polypeptide was cloned and sequenced I was responsible for overseeing the sequencing of novel polypeptides, including the PRO1244 polypeptide (SEQ ID NO:130) claimed in the above-identified application.
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of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

Audrey Goddard

Date

SV 2042357 v1 6/18/04 1:29 PM (39780.2830)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Docket No:

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Rachel B. Kapust

For:

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ACIDS ENCODING THE SAME

Commissioner for Patents Washington, D.C. 20231

DECLARATION OF WILLIAM WOOD, Ph.D. UNDER 37 CFR 1.131

I, William Wood, Ph.D. do hereby declare and say as follows:

- I am Director and Staff Scientist at the Department of Bioinformatics, of Genentech, 1. Inc., South San Francisco, CA 94080.
- I am one of the inventors of the above-identified application. 2.
- 3. I have read and understood the claims pending in this application, and are aware that the claims have been rejected as anticipated by U.S. Patent No. 6,525,174 (Young et al., issue date February 25, 2003 and effective filing date June 4, 1998).
- I, along with other inventors of this application, conceived and reduced to practice the 4. polypeptide designated as PRO1244 (SEQ ID NO:130) claimed in the above-identified application in the United States prior to June 4, 1998.
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- A cDNA clone, referred to as DNA64883-1526 in the above-identified application, 6. was identified as encoding the PRO1244 polypeptide.
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of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

William Wood

Date

SV 2042358 v1 6/18/04 1:30 PM (39780.2830)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Rachel B. Kapust

For:

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Commissioner for Patents Washington, D.C. 20231

DECLARATION OF WILLIAM WOOD, Ph.D. UNDER 37 CFR 1.131

I, William Wood, Ph.D. do hereby declare and say as follows:

- I am Director and Staff Scientist at the Department of Bioinformatics, of Genentech, 1. Inc., South San Francisco, CA 94080.
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the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

William Wood

Date

SV 2037583 v1 6/9/04 1:21 PM (39780.2830) Exhibit A to Declarations of Audrey Goddard and William Wood under 37 CFR 1.131

GSeqEdit Database Report

DNA64883 wiw GSeqEdit >510 Sites [All Sites] >DNA64883 [Full]

>HBN64883.seq, sequenced at ABI/ACGT by Peter Ma and Ellson Chen >human ortholog of implantation-associated protein - Rattus ▶ DNA64883 sheldens GSeqEdit DNA64883 goddarda GSeqEdit DNA64883 zemin GSeqEdit

hpy991 mnll 1 CGGAATICGG CICGAGGAGC GAACAIGGCA GCGCGTIGGC GGTTITGGIG IGTCICTGIG ACCAIGGIGG IGGCGCIGCI CATCGIIIGC GACGIICCCI GCCTTAAGCC GAGCTCCTCG CTTGTACCGT CGCGCAACCG CCAAAACCAC ACAGAGACAC TGGTACCACC ACCGCGACGA GTAGCAAACG CTGCAAGGGA fnu4HI/bsoFI hhal/cfol tseI ppvI hinPI haeII btgI/bstDSI nlaIII mslI bstXI bsaJI dsaI styI ncol tsp45I bsmAI maeIII tseI bstUI[M.hhaI-] fnuDII/mvnI hinPI aciI bbvI bsh1236I nlaIII hhaI/cfoI fnu4HI/bsoFI MAARW thaI aval[M.taqI-] paeR7I mwoI tsp5091[M.ecoRI-] apol mwol bseRI mnlI taqI xhoI tliI smlI ecoRI

dde dsq

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aluī	Iluvq	mspAll/nspBII
		hpy1881
		bsaXI
mnlI	alwNI[dcm-]	alw261/bsmAI

bsmAI 101 CAGCCTCTGC CCAAAGAAAG AAGGAGATGG TGTTATCTGA AAAGGTTAGT CAGCTGATGG AATGGACTAA CAAAAGACCT GTAATAAGAA TGAATGGAGA GICGGAGACG GGTITCITIC TICCTCTACC ACAATAGACT TITCCAATCA GICGACTACC TTACCTGAIT GITITCIGGA CATTATICTT ACTTACCICI × z 3 O L M E တ K S H K E M V A S 27

H4111 cac81	I cac8I	hpvCH4V al	GT TTGCAAGCAA	CA AACGTTCGTT	V C. K Q
bst4CI/hpyCH4III	ahdI/eam1105I	hpyCH4V tspRI	A CTGCATAGAC AGTGTGTC	I GACGIAICIG ICACACAG	PRNYSVIVMFTALQLHRQCVVCKQ
tspRI	btsI	nlaIII	CATGITCAC IGCICICCA	STACAAGTG ACGAGAGGTT	MFT AL.Q
		tsp509I	ATTAC TCCGTTATCG TO	TAATG AGGCAATAGC A	A I A S Y
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		166Ådų	201 CAAGIICCGI CGCCIIGIGA AAGCCCCCACC GAGAAAIIAC ICCGIIAICG ICAIGIICAC IGCICICCAA CIGCAIAGAC AGIGIGIGIGI IIIGAAAGAA	GTTCAAGGCA GCGGAACACT TTCGGGGTGG CTCTTTAATG AGGCAATAGC AGTACAAGTG ACGAGGGTT GACGTATCTG TCACACAGGC AACGTTCGTT	60 KFR RLVK A

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301 GCTGATGAAG AATTCCAGAT CCTGGCAAAC TCCTGGCGAT ACTCCAGTGC ATTCACCAAC AGGATATTTT TTGCCATGGT GGATTTTGAT GAAGGCTCTG
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                                                                                                                                 hpyCH4V
                                                                                                              ecoRII[dcm-]
                                                                                                                                                                      bssKI[dcm-]
                                                        scrFI[dcm-]
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                                                                                            mvaI
mbol/ndell[dam-]
                 dpnII[dam-]
                                                                                                             alw261/bsmAI
                                    dpn1[dam+]
                                                       alwI[dam-]
                                                                          bstYI/xhoII
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                                                                                            alwNI[dcm-]
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                                                                                                                                                                    apol bslI[dcm-]
                                                                                                                                                                                    hpy188III
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ecoRII[dcm-]

dsaV[dcm-]

bstNI

bssKI[dcm-]

apyl[dcm+]

scrFI[dcm-]

pspGI

mvaI

CGACTACTIC TIAAGGICIA GGACCGIIIG AGGACCGCIA IGAGGICACG IAAGIGGIIG ICCIAIAAAA AACGGIACCA CCIAAAACIA CIICCGAGAC

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GSeqEdit, DNA64883 [Full], page 3

tsp5091[M.ecoRI-]

ecoRI hpyCH4V
apoI ecoNI bslI hphI

aciI 401 ATGTATITCA GAIGCIAAAC AIGAAITCAG CICCAACIII CAICAACIII CCIGCAAAAG GGAAACCCAA ACGGGGIGAI ACAIAIGAGI TACAGGIGCG TACATAAAGT CTACGATITG TACTTAAGTC GAGGIIGAAA GTAGIIGAAA GGACGIIIIC CCIIIGGGII IGCCCCCACTA IGTATACICA AIGICCACGC maeIII ndeI hphI hpy188I 127

Ω ပ œ G hpall mbol/ndell[dam-] dpnII[dam-] dpnI[dam+] blpI/bpu1102I scrFI[M.hpaII-] sau3AI щ Idsm nciI dsaV ဟ z ddeI[M.aluI-] Σ cellI/espI bspCNI

bsmFI sau96I nlaIV

501 GGGTTTTTCA GCTGAGCAGA TTGCCCGGTG GATCGCCGAC AGAACTGATG TCAATATTAG AGTGATTAGA CCCCCAAATT ATGCTGGTCC CCTTATGTTG CCCAAAAAGT CGACTCGTCT AACGGGCCAC CTAGCGGCTG TCTTGACTAC AGTTATAATC TCACTAATCT GGGGGTTTAA TACGACCAGG GGAATACAAC Σ avalI bslI ы Ġ tsp509I > Н Ľ٠ bssKI alwI[dam-] mspAll/nspBII Œ 160

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CCTAACGAAA ACCGACAATA ACCACCTGAA CACATAGAAG CTTCTTCATT ATACCTTAAA GAGAAATTAT TTTGACCTAC CCGAAAACGT CGAAACACAA 601 GGATTGCTIT TGGCTGTTAT TGGTGGACTT GTGTATCTTC GAAGAAGTAA TATGGAATTT CTCTTTAATA AAACTGGATG GGCTTTTGCA GCTTTGTGTT mwol hpyCH4V bsrI mseI apol bael ტ G r 193

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dpnII[dam-]	dpnI[dam+]	bstYI/xhoII	balli	901 GACATGGATA TTGGAAAGCG AAAGATAATG TGTGTGGCTG GTATTGGACT TGTTGTATTA TTCTTCAGTT GGATGCTCTC TATTTTTAGA TCTAAATATC	CTGTACCTAT AACCTITCGC TITCTATTAC ACACACGGAC CATAACCTGA ACAACATAAT AAGAAGTCAA CCTACGAGAG ATAAAAATCT AGATTTATAG
	sfaNI	fokI	bstF5I	GGATGCTCTC	CCTACGAGAG
		eco571 fokI	IIoqu	TICTICAGII	AAGAAGTCAA
	,			TGTTGTATTA	ACAACATAAT
				GTATTGGACT	CATAACCTGA
				TGTGTGGCTG	ACACACCGAC
				AAAGATAATG	TTTCTATTAC
				TTGGAAAGCG	AACCTTTCGC
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GSeqEdit, DNA64883 [Full], page 5

bsmFI

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bpmI/gsuI[dcm-] rsaI avall nlaIV

csp6I bsrI **DPuMI** tru9I

tsp509I

scal

tspRI

eco01091/draII

mseI

aluI hpy188I

1001 ATGCTACCC ATACAGCTTT CTGATGAGTT AAAAAGGTCC CAGAGATATA TAGACACTGG AGTACTGGAA ATTGAAAAAC GAAAATCGTG TGTGTTTGAA TACCGAIGGG TAIGTCGAAA GACTACTCAA TITITCCAGG GICTCTATAI AICTGIGACC TCAIGACCIT TAACTITIIG CITITAGCAC ACACAAACTI တ Σ H တ G

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tru9I mseI

tru9I tru9I ahaIII/draI Swal mnll mbolI hpyCH4V

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mseI

msel

1101 AAGAAGAATG CAACTTGTAT ATTTTGTATT ACCTCTTTTT TTCAAGTGAT TTAAATAGTT AATCATTTAA CCAAAGAAGA TGTGTAGTGC CTTAACAAGC TICTICITAC GIIGAACAIA TAAAACAIAA IGGAGAAAAA AAGIICACIA AATITAICAA IIAGIAAAII GGIIICIICI ACACAICACG GAAIIGIICG

mnlI

tru9I rsal tsp5091 tsp509I tru9I mboll tspRI earI/ksp632I mnll tru9I tsp509I hpy1881 **bspCNI** ddeI mnlI

1201 AATCCTCTGT CAAAATCTGA GGTATTTGAA AATAATTATC CTCTTAACCT TCTCTTCCCA GTGAACTTTA TGGAACATTT AATTTAGTAC AATTAAGTAT csp6I mseI mseI

mseI

TTAGGAGACA GTITTAGACT CCATAAACTT TTATTAATAG GAGAATTGGA AGAGAAGGGT CACTTGAAAT ACCTTGTAAA TTAAATCATG TTAAFTCATA

tru91

mseI

hpaI

1301 AITATAAAAA TIGTAAAACT ACTACTIIGI TITAGITAGA ACAAAGCTCA AAACTACTIT AGTTAACTIG GICATCTGAI TITATATIGC CTTATCCAAA taatatttit aacatttiga igaigaaaca aaatcaatci igtticgagi ittgaigaaa icaattgaac cagtagacta aaatataacg gaataggitt bslI hincII/hindII hpy188I aluI tsp509I

psil

dcm-]	
ŭ	
scrFI	

pspGI

mvaI

ecoRII[dcm-]

dsaV[dcm-]

bstNI

bssKI[dcm-]

apy1[dcm+]

maeIII

ndeI

sexAI

hpy188III

CTACCCTTT CATTCAGGAC TGGTCCACAA GGGTGTATAC GGACAATGTC TATTGATGTA ATCCTTAAGT AAGAATCGAA GAAGTAGAAA CACACCTACA

tsp5091[M.ecoRI-] XmnI IJoqu aluI asp700 ecoRI

fokī

mslI ddeI[M.aluI-]

bstF5I 1401 GATGGGGAAA GTAAGTCCTG ACCAGGTGTT CCCACATATG CCTGTTACAG ATAACTACAT TAGGAATTCA TTCTTAGCTT CTTCATCTTT GTGTGGATGT apol

taiI

hgiAI/aspHI

bsp1286

rmal **DSIHKAI**

hpy1881

mboII bpuAI

eco57I

aflii maei bspC hpy1881 mael1/hpyCH4IV

mboli bmyl btri bfal mnli

CATAIGAAAI GCGIAGAAAG GAAAACICAI CICITIAAIA CACACAGIAC ACCAGAAGAC IITIACCIIG IGGIAAGAAG ICICGIGIGC AGAICGGGAG 1501 GTATACTITA CGCATCTITC CITITGAGIA GAGAAATIAT GIGIGICAIG IGGICTICIG AAAAIGGAAC ACCATICIIC AGAGCACACG ICIAGCCCIC nlaIII bbsI

tsp509I

bst1107I bst217I

accI

tth11111/aspI

pleI

pflFI

mlyI

bpmI/gsuI[dcm-]

bsmAI

bsmAI

hinfI

1601 AGCAAGACAG TIGITICICC ICCICCTIGC ATAITICCIA CIGCGCICCA GCCIGAGIGA TAGAGIGAGA CICIGICICA AAAAAAAGIA ICICIAAAIA TCGTTCTGTC AACAAAGAGG AGGAGGAACG TATAAAGGAT GACGCGAGGT CGGACTCACT ATCTCACTCT GAGACAGAGT TTTTTTCAT AGAGATTTAT

hhal/cfol bspCNI

bst4CI/hpyCH4III mnll hpyCH4V

bseRI mnlI bseRI

hinPI

tfiI

tsp45I

tru91 maeIII

Ihqh

mseI

hpaI

tsp509I

tru9I

hinfI XmnI

ddeI

1701 CAGGATTATA ATTTCÍGCTT GAGTATGGIG TTAACTACCT TGTATTTAGA AAGATTTCAG ATTCATTCCA TCTCCTTAGT TTTCTTTAA GGTGACCCAT msel bstEII hpy188I asp700 hincII/hindII smlI

GTCCTAATAT TAAAGACGAA CTCATACCAC AATTGATGGA ACATAAATCT TTCTAAAGTC TAAGTAAGGT AGAGGAATCA AAAGAAAATT CCACTGGGTA

maeIII ddeI[M.aluI-]

tspRI

nlaIII

haeIII/palI

tsp509I

csp6I maeIII

dde

rsaI

tsp45I

1801 CIGIGATAAA AATATAGCTT AGTGCTAAAA TCAGTGTAAC TTATACATGG CCTAAAATGT TTCTACAAAT TAGAGTTTGT CACTTATTCC ATTTGTACCT GACACTATIT TIATATCGAA TCACGATTTT AGTCACATTG AATATGTACC GGATTTTACA AAGATGTTTA ATCTCAAACA GTGAATAAGG TAAACATGGA

bssS hpy18

sau3AI

dpnII[d dpnI[da

haelli/pall

mnll bsaJI

ddeI bspCNI TICICITITI AICCGAGICA AICITITCCI GAGGGACCGG ICCGCGICAC IGAAIGCGGA CAITAGAGIC GIGAAACCCI CCGGIICCGI CCGICIAGIG

1901 AAGAGAAAAA TAGGCTCAGT TAGAAAAGGA CTCCCTGGCC AGGCGCAGTG ACTTACGCCT GTAATCTCAG CACTTTGGGA GGCCAAGGCA GGCAGATCAC

hinfI apyI[dcm+] btsI

ddeI bspCNI

mlyI bsaJI apyI[dcm+]

mboI/nd

2001 GAGGICAGGA GITCGAGACC AICCIGGCCA ACAIGGIGAA ACCCCGICTC TACTAAAAAT ATAAAAATTA GCIGGGIGIG GIGGCAGGAG CCIGTAAICC CICCAGICCI CAAGCICIGG IAGGACCGGI IGIACCACII IGGGGCAGAG AIGAITITIA IAITITIAAI CGACCCACAC CACCGICCIC GGACAITAGG tsp509I bsmAI esp3I bsmBI hpy188III apy1[dcm+] hphI nlaIII hpy188III bsaI bstF5I haeIII/palI bssKI[dcm-] taqI fokI cfrI

mscI/ball[dcm-]

eael[dcm-]

scrFI[dcm-]

Ibggd mvaľ ecoRII[dcm-]

dsaV[dcm-]

bstNI

ecoRII[dcm-] bssKI [dcmapyI[dcm+] dsaV[dcm-] bstNI dpnII[dam-] hpyCH4V mboI/ndeII[dam-] tspRI btsI sau3AI mnlI hpy188III **bspCNI** ddeI hinfI tfiI mnli mnli bssSI PSPCNI ddeI

scrFI[dcm-]

pspGI mvaI

2101 CAGCTACACA GGAGGCTGAG GCACGAGAAT CACTTGAACT CAGGAGATGG AGGTTTCAGT GAGCCGAGAT CACGCCACTG CACTCCAGCC TGGCAACAGA GTCGATGIGI CCICCGACIC CGIGCICIIA GIGAACIIGA GICCICIACC ICCAAAGICA CICGGCICIA GIGCGGIGAC GIGAGGICGG ACCGIIGICI dpnI[dam+] bsgI bpmI/gsuI[dcm-] tspRI

fnu4HI/bsoFI

haeIII/palI

mcrI

eagI/xmaIII/eclXI

eaeI

cfrI

rmaI

bsiEI

mael notI

fnu4HI/bsoFI bfaI

acil acil

hinfi

bsmAI

mlyI pleI

2201 GCGAGACTCC ATCTCAAAAA AAAAAAAA AAAAAAAA AAAAAAAGG CGGCCGCCGA CTAGTGAGC CGCTCTGAGG TAGAGTTTTT TTTTTTTT TTTTTTTT TTTTTTCCC GCCGGCGGCT GATCACTCG

> length: 2269

accI (GTMKAC):

acil(CCGC):

780 1586

278 714 1150

aflIII (ACRYGT):

ahalii (TTTAAA)

ahdI (GACNNNNNGTC):

aluI (AGCT):

alw26I (CAGNNNCTG)

alwI (GGATCNNNN):

alwni (CAGNNNCTG): apol (RAATTY):

apyI (CCWGG):

asp700 (GAANNNTTC):

asphi (GWGCWC);

1464 1749

1582